SEQUENCE LISTING

<110> Takeda Pharmaceutical Company Limited

<120> Preventing or treating agent for cancer

<130> P04-215PCT

<150> JP 2003-427782
<151> 2003-12-24

<160> 38

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<212> PRT
<213> Homo sapiens

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Thr Leu Tyr Val Gly Ala Arg Glu Ala Leu Phe Ala Leu Ser Ser Asn
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Thr Arg Pro Leu Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His
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Thr Glu Ser Glu Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu
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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<210> 4
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<212> PRT
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Leu Leu Leu Gln Pro Pro Pro Thr Trp Ala Leu Ser Pro Arg Ile
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Ser Leu Pro Leu Gly Ser Glu Glu Arg Pro Phe Leu Arg Phe Glu Ala
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Glu His Ile Ser Asn Tyr Thr Ala Leu Leu Leu Ser Arg Asp Gly Arg
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Thr Leu Tyr Val Gly Ala Arg Glu Ala Leu Phe Ala Leu Ser Ser Asn
                85                  90                  95
Leu Ser Phe Leu Pro Gly Gly Glu Tyr Gln Glu Leu Leu Trp Gly Ala
            100                 105                 110
Asp Ala Glu Lys Lys Gln Gln Cys Ser Phe Lys Gly Lys Asp Pro Gln
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Arg Asp Cys Gln Asn Tyr Ile Lys Ile Leu Leu Pro Leu Ser Gly Ser
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His Leu Phe Thr Cys Gly Thr Ala Ala Phe Ser Pro Met Cys Thr Tyr
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Ile Asn Met Glu Asn Phe Thr Leu Ala Arg Asp Glu Lys Gly Asn Val
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Ser Phe Gln Gly Asn Asp Pro Ala Ile Ser Arg Ser Gln Ser Leu Arg
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Thr Glu Gly Ser Ala Val Cys Val Phe Thr Met Lys Asp Val Gln Arg
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Phe Leu Gly Thr Gly Asp Gly Arg Leu His Lys Ala Val Ser Val Gly
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Ala Thr Arg Pro Trp Ile Gln Asp Ile Glu Gly Ala Ser Ala Lys Asp
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Trp Ser Leu Glu Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro
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Val Pro Val Ile Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly
    690                     695                     700
Lys Ala Ser Trp Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val
705                     710                     715                     720
Met Cys Thr Leu Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu
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Cys Ala Ser Val His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu
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Thr Arg Pro Leu Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His
                770                     775                     780
Arg Gly Tyr Gln Ser Leu Ser Asp Ser Pro Pro Gly Ser Arg Val Phe
785                     790                     795                     800
Thr Glu Ser Glu Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu
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<212> DNA
<213> Homo sapiens

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Glu His Ile Ser Asn Tyr Thr Ala Leu Leu Leu Ser Arg Asp Gly Arg
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\<210\> 10
\<211\> 837
\<212\> PRT
\<213\> Homo sapiens

\<400\> 10

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                20                  25                  30
Leu Leu Leu Gln Pro Pro Pro Pro Thr Trp Ala Leu Ser Pro Arg Ile
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Ser Leu Pro Leu Gly Ser Glu Glu Arg Pro Phe Leu Arg Phe Glu Ala
         50                      55                      60
Glu His Ile Ser Asn Tyr Thr Ala Leu Leu Leu Ser Arg Asp Gly Arg
65                      70                      75                      80
Thr Leu Tyr Val Gly Ala Arg Glu Ala Leu Phe Ala Leu Ser Ser Asn
                  85                      90                      95
Leu Ser Phe Leu Pro Gly Gly Glu Tyr Gln Glu Leu Leu Trp Gly Ala
                 100                     105                     110
Asp Ala Glu Lys Lys Gln Gln Cys Ser Phe Lys Gly Lys Asp Pro Gln
             115                     120                     125
Arg Asp Cys Gln Asn Tyr Ile Lys Ile Leu Leu Pro Leu Ser Gly Ser
         130                     135                     140
His Leu Phe Thr Cys Gly Thr Ala Ala Phe Ser Pro Met Cys Thr Tyr
145                     150                     155                     160
Ile Asn Met Glu Asn Phe Thr Leu Ala Arg Asp Glu Lys Gly Asn Val
                 165                     170                     175
Leu Leu Glu Asp Gly Lys Gly Arg Cys Pro Phe Asp Pro Asn Phe Lys
             180                     185                     190
Ser Thr Ala Leu Val Val Asp Gly Glu Leu Tyr Thr Gly Thr Val Ser
         195                     200                     205
Ser Phe Gln Gly Asn Asp Pro Ala Ile Ser Arg Ser Gln Ser Leu Arg
     210                     215                     220
Pro Thr Lys Thr Glu Ser Ser Leu Asn Trp Leu Gln Asp Pro Ala Phe
225                     230                     235                     240
Val Ala Ser Ala Tyr Ile Pro Glu Ser Leu Gly Ser Leu Gln Gly Asp
                 245                     250                     255
Asp Asp Lys Ile Tyr Phe Phe Phe Ser Glu Thr Gly Gln Glu Phe Glu
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Phe Phe Glu Asn Thr Ile Val Ser Arg Ile Ala Arg Ile Cys Lys Gly
             275                     280                     285
Asp Glu Gly Gly Glu Arg Val Leu Gln Gln Arg Trp Thr Ser Phe Leu
     290                     295                     300
Lys Ala Gln Leu Leu Cys Ser Arg Pro Asp Asp Gly Phe Pro Phe Asn
305                     310                     315                     320
Val Leu Gln Asp Val Phe Thr Leu Ser Pro Ser Pro Gln Asp Trp Arg
                 325                     330                     335
Asp Thr Leu Phe Tyr Gly Val Phe Thr Ser Gln Trp His Arg Gly Thr
             340                     345                     350
Thr Glu Gly Ser Ala Val Cys Val Phe Thr Met Asn Asp Val Gln Arg
             355                     360                     365
Val Phe Ser Gly Leu Tyr Lys Glu Val Asn Arg Glu Thr Gln Gln Met
     370                     375                     380
Val His Arg Asp Pro Pro Val Pro Thr Pro Arg Pro Gly Ala Cys Ile
385                     390                     395                     400
Thr Asn Ser Ala Arg Glu Arg Lys Ile Asn Ser Ser Leu Gln Leu Pro
                 405                     410                     415
Asp Arg Val Leu Asn Phe Leu Lys Asp His Phe Leu Met Asp Gly Gln
             420                     425                     430
Val Arg Ser Arg Met Leu Leu Leu Gln Pro Gln Ala Arg Tyr Gln Arg
         435                     440                     445
Val Ala Val His Arg Val Pro Gly Leu His His Thr Tyr Asp Val Leu
     450                     455                     460
Phe Leu Gly Thr Gly Asp Gly Arg Leu His Lys Ala Val Ser Val Gly
465                     470                     475                     480
Pro Arg Val His Ile Ile Glu Glu Leu Gln Ile Phe Ser Ser Gly Gln
                 485                     490                     495
Pro Val Gln Asn Leu Leu Leu Asp Thr His Arg Gly Leu Leu Tyr Ala
             500                     505                     510
Ala Ser His Ser Gly Val Val Gln Val Pro Met Ala Asn Cys Ser Leu
                              13/27
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Tyr Arg Ser Cys Gly Asp Cys Leu Leu Ala Arg Asp Pro Tyr Cys Ala
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Trp Ser Gly Ser Ser Cys Lys His Val Ser Leu Tyr Gln Pro Gln Leu
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Ala Thr Arg Pro Trp Ile Gln Asp Ile Glu Gly Ala Ser Ala Lys Asp
                565                    570                    575
Leu Cys Ser Ala Ser Ser Val Val Ser Pro Ser Phe Val Pro Thr Gly
            580                    585                    590
Glu Lys Pro Cys Glu Gln Val Gln Phe Gln Pro Asn Thr Val Asn Thr
        595                    600                    605
Leu Ala Cys Pro Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg
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Asn Gly Ala Pro Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr
625                    630                    635                    640
Gly Asp Leu Leu Leu Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys
                645                    650                    655
Trp Ser Leu Glu Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro
            660                    665                    670
Glu Val Val Glu Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser
        675                    680                    685
Val Pro Val Ile Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly
    690                    695                    700
Lys Ala Ser Trp Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val
705                    710                    715                    720
Met Cys Thr Leu Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu
                725                    730                    735
Leu Tyr Arg His Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu
            740                    745                    750
Cys Ala Ser Val His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu
        755                    760                    765
Thr Arg Pro Leu Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His
    770                    775                    780
Arg Gly Tyr Gln Ser Leu Ser Asp Ser Pro Pro Gly Ser Arg Val Phe
785                    790                    795                    800
Thr Glu Ser Glu Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu
                805                    810                    815
Val Ser Pro Val Cys Pro Arg Pro Arg Val Arg Leu Gly Ser Glu Ile
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Arg Asp Ser Val Val
            835


<210> 11
<211> 2511
<212> DNA
<213> Homo sapiens

<400> 11
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agattcgaag ctgaacacat ctccaactac acagcccttc tgctgagcag ggatggcagg    240
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ccaggcgggg agtaccagga gctgctttgg ggtgcagacg cagagaagaa acagcagtgc    360
agcttcaagg gcaaggaccc acagcgcgac tgtcaaaact acatcaagat cctcctgccg    420
ctcagcggca gtcacctgtt cacctgtggc acagcagcct tcagccccat gtgtacctac    480
atcaacatgg agaacttcac cctggcaagg gacgagaagg ggaatgtcct cctggaagat    540
ggcaagggcc gttgtccctt cgacccgaat ttcaagtcca ctgccctggt ggttgatggc    600
gagctctaca ctggaacagt cagcagcttc caagggaatg acccggccat ctcgcggagc    660
caaagccttc gccccaccaa gaccgagagc tccctcaact ggctgcaaga cccagctttt    720
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gtggcctcag cctacattcc tgagagcctg ggcagcttgc aaggcgatga tgacaagatc    780
tacttttct tcagcgagac tggccaggaa tttgagttct ttgagaacac cattgtgtcc    840
cgcattgccc gcatctgcaa gggcgatgag ggtggagagc gggtgctaca gcagcgctgg    900
acctccttcc tcaaggccca gctgctgtgc tcacggcccg acgatggctt ccccttcaac    960
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aactttctca aggaccactt cctgatggac gggcaggtcc gaagccgcat gctgctgctg   1320
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<210> 12
<211> 3766
<212> DNA
<213> Homo sapiens

<400> 12
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ggaggcgggg gcccccgggg cgactcgggg gcggaccgcg gggcggagct gccgcccgtg    180
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ggggtcttca cttcccagtg gcacagggga actacagaag gctctgccgt ctgtgtcttc   1320
acaatgaatg atgtgcagag agtcttcagc ggcctctaca aggaggtgaa ccgtgagaca   1380
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                              15/27
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cagcagatgg tacaccgtga cccacccgtg cccacacccc ggcctggagc gtgcatcacc   1440
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tcaacactgc ccagcacagg ggccctgaat ttatgtggtt tttatacatt ttttaataag   3720
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<213> Artificial Sequence

<220>
<223> Oligonucleotide

<400> 13
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<210> 14
<211> 20
<212> DNA
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<220>
<223> Oligonucleotide

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<210> 15
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<220>
<223> Oligonucleotide

<400> 15
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<210> 16
<211> 20
<212> DNA
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<220>
<223> Oligonucleotide

<400> 16
tcggctccta catcaacaac                                            20

<210> 17
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer

<400> 17
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<210> 18·
<211> 27
<212> DNA
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<220>
<223> Primer

<400> 18
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<210> 19
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<212> DNA
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<220>
<223> Primer

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<210> 20
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<212> DNA
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<210> 21
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<220>
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<210> 22
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<213> Homo sapiens

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<210> 23
<211> 15
<212> PRT
<213> Homo sapiens

<400> 23
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<210> 24
<211> 15
<212> PRT
<213> Homo sapiens

<400> 24
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                5   10   15

<210> 25
<211> 14
<212> PRT
<213> Homo sapiens

<400> 25
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                5   10

<210> 26
<211> 2135
<212> PRT
<213> Homo sapiens

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<400> 26
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Thr Tyr Leu Gln His Leu Ala Arg Asp Pro Thr Ser Gly Thr Leu Tyr
        35   40   45
Leu Gly Ala Thr Asn Phe Leu Phe Gln Leu Ser Pro Gly Leu Gln Leu
    50   55   60
Glu Ala Thr Val Ser Thr Gly Pro Val Leu Asp Ser Arg Asp Cys Leu
65   70   75   80
Pro Pro Val Met Pro Asp Glu Cys Pro Gln Ala Gln Pro Thr Asn Asn
                85   90   95
Pro Asn Gln Leu Leu Leu Val Ser Pro Gly Ala Leu Val Val Cys Gly
            100   105   110
Ser Val His Gln Gly Val Cys Glu Gln Arg Arg Leu Gly Gln Leu Glu
        115   120   125
Gln Leu Leu Leu Arg Pro Glu Arg Pro Gly Asp Thr Gln Tyr Val Ala
        130   135   140
Ala Asn Asp Pro Ala Val Ser Thr Val Gly Leu Val Ala Gln Gly Leu
145   150   155   160
Ala Gly Glu Pro Leu Leu Phe Val Gly Arg Gly Tyr Thr Ser Arg Gly
                165   170   175
Val Gly Gly Gly Ile Pro Pro Ile Thr Thr Arg Ala Leu Trp Pro Pro
                180   185   190
Asp Pro Gln Ala Ala Phe Ser Tyr Glu Glu Thr Ala Lys Leu Ala Val
        195   200   205
Gly Arg Leu Ser Glu Tyr Ser His His Phe Val Ser Ala Phe Ala Arg
    210   215   220
Gly Ala Ser Ala Tyr Phe Leu Phe Leu Arg Arg Asp Leu Gln Ala Gln
225   230   235   240
Ser Arg Ala Phe Arg Ala Tyr Val Ser Arg Val Cys Leu Arg Asp Gln
                245   250   255
His Tyr Tyr Ser Tyr Val Glu Leu Pro Leu Ala Cys Glu Gly Gly Arg
            260   265   270
Tyr Gly Leu Ile Gln Ala Ala Ala Val Ala Thr Ser Arg Glu Val Ala
        275   280   285
His Gly Glu Val Leu Phe Ala Ala Phe Ser Ser Ala Ala Pro Pro Thr
    290   295   300
Val Gly Arg Pro Pro Ser Ala Ala Ala Gly Ala Ser Gly Ala Ser Ala
305   310   315   320
Leu Cys Ala Phe Pro Leu Asp Glu Val Asp Arg Leu Ala Asn Arg Thr
                325   330   335
Arg Asp Ala Cys Tyr Thr Arg Glu Gly Arg Ala Glu Asp Gly Thr Glu
                340   345   350
Val Ala Tyr Ile Glu Tyr Asp Val Asn Ser Asp Cys Ala Gln Leu Pro
        355   360   365
Val Asp Thr Leu Asp Ala Tyr Pro Cys Gly Ser Asp His Thr Pro Ser
    370   375   380
Pro Met Ala Ser Arg Val Pro Leu Glu Ala Thr Pro Ile Leu Glu Trp
385   390   395   400
Pro Gly Ile Gln Leu Thr Ala Val Ala Val Thr Met Glu Asp Gly His
                405   410   415
Thr Ile Ala Phe Leu Gly Asp Ser Gln Gly Gln Leu His Arg Val Tyr
                420   425   430
Leu Gly Pro Gly Ser Asp Gly His Pro Tyr Ser Thr Gln Ser Ile Gln
        435   440   445
Gln Gly Ser Ala Val Ser Arg Asp Leu Thr Phe Asp Gly Thr Phe Glu
    450   455   460

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His Leu Tyr Val Met Thr Gln Ser Thr Leu Leu Lys Val Pro Val Ala
465   470   475   480
Ser Cys Ala Gln His Leu Asp Cys Ala Ser Cys Leu Ala His Arg Asp
             485   490   495
Pro Tyr Cys Gly Trp Cys Val Leu Leu Gly Arg Cys Ser Arg Arg Ser
            500   505   510
Glu Cys Ser Arg Gly Gln Gly Pro Glu Gln Trp Leu Trp Ser Phe Gln
        515   520   525
Pro Glu Leu Gly Cys Leu Gln Val Ala Ala Met Ser Pro Ala Asn Ile
    530   535   540
Ser Arg Glu Glu Thr Arg Glu Val Phe Leu Ser Val Pro Asp Leu Pro
545   550   555   560
Pro Leu Trp Pro Gly Glu Ser Tyr Ser Cys His Phe Gly Glu His Gln
             565   570   575
Ser Pro Ala Leu Leu Thr Gly Ser Gly Val Met Cys Pro Ser Pro Asp
             580   585   590
Pro Ser Glu Ala Pro Val Leu Pro Arg Gly Ala Asp Tyr Val Ser Val
        595   600   605
Ser Val Glu Leu Arg Phe Gly Ala Val Val Ile Ala Lys Thr Ser Leu
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Ser Phe Tyr Asp Cys Val Ala Val Thr Glu Leu Arg Pro Ser Ala Gln
625   630   635   640
Cys Gln Ala Cys Val Ser Ser Arg Trp Gly Cys Asn Trp Cys Val Trp
            645   650   655
Gln His Leu Cys Thr His Lys Ala Ser Cys Asp Ala Gly Pro Met Val
        660   665   670
Ala Ser His Gln Ser Pro Leu Val Ser Pro Asp Pro Pro Ala Arg Gly
        675   680   685
Gly Pro Ser Pro Ser Pro Pro Thr Ala Pro Lys Ala Leu Ala Thr Pro
    690   695   700
Ala Pro Asp Thr Leu Pro Val Glu Pro Gly Ala Pro Ser Thr Ala Thr
705   710   715   720
Ala Ser Asp Ile Ser Pro Gly Ala Ser Pro Ser Leu Leu Ser Pro Trp
            725   730   735
Gly Pro Trp Ala Gly Ser Gly Ser Ile Ser Ser Pro Gly Ser Thr Gly
            740   745   750
Ser Pro Leu His Glu Glu Pro Ser Pro Pro Ser Pro Gln Asn Gly Pro
        755   760   765
Gly Thr Ala Val Pro Ala Pro Thr Asp Phe Arg Pro Ser Ala Thr Pro
    770   775   780
Glu Asp Leu Leu Ala Ser Pro Leu Ser Pro Ser Glu Val Ala Ala Val
785   790   795   800
Pro Pro Ala Asp Pro Gly Pro Glu Ala Leu His Pro Thr Val Pro Leu
            805   810   815
Asp Leu Pro Pro Ala Thr Val Pro Ala Thr Thr Phe Pro Gly Ala Met
            820   825   830
Gly Ser Val Lys Pro Ala Leu Asp Trp Leu Thr Arg Glu Gly Gly Glu
            835   840   845
Leu Pro Glu Ala Asp Glu Trp Thr Gly Gly Asp Ala Pro Ala Phe Ser
    850   855   860
Thr Ser Thr Leu Leu Ser Gly Asp Gly Asp Ser Ala Glu Leu Glu Gly
865   870   875   880
Pro Pro Ala Pro Leu Ile Leu Pro Ser Ser Leu Asp Tyr Gln Tyr Asp
             885   890   895
Thr Pro Gly Leu Trp Glu Leu Glu Glu Ala Thr Leu Gly Ala Ser Ser
            900   905   910
Cys Pro Cys Val Glu Ser Val Gln Gly Ser Thr Leu Met Pro Val His
        915   920   925
Val Glu Arg Glu Ile Arg Leu Leu Gly Arg Asn Leu His Leu Phe Gln
    930   935   940

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Asp Gly Pro Gly Asp Asn Glu Cys Val Met Glu Leu Glu Gly Leu Glu
945   950   955   960
Val Val Val Glu Ala Arg Val Glu Cys Glu Pro Pro Asp Thr Gln
              965   970   975
Cys His Val Thr Cys Gln Gln His Gln Leu Ser Tyr Glu Ala Leu Gln
              980   985   990
Pro Glu Leu Arg Val Gly Leu Phe Leu Arg Arg Ala Gly Arg Leu Arg
              995   1000   1005
Val Asp Ser Ala Glu Gly Leu His Val Val Leu Tyr Asp Cys Ser Val
    1010   1015   1020
Gly His Gly Asp Cys Ser Arg Cys Gln Thr Ala Met Pro Gln Tyr Gly
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Cys Val Trp Cys Glu Gly Glu Arg Pro Arg Cys Val Thr Arg Glu Ala
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Cys Gly Glu Ala Glu Ala Val Ala Thr Gln Cys Pro Ala Pro Leu Ile
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His Ser Val Glu Pro Leu Thr Gly Pro Val Asp Gly Gly Thr Arg Val
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Thr Ile Arg Gly Ser Asn Leu Gly Gln His Val Gln Asp Val Leu Gly
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Met Val Thr Val Ala Gly Val Pro Cys Ala Val Asp Ala Gln Glu Tyr
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Glu Val Ser Ser Ser Leu Val Cys Ile Thr Gly Ala Ser Gly Glu Glu
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Ser Glu His Asp Phe Ala Tyr Gln Asp Pro Lys Val His Ser Ile Phe
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Pro Ala Arg Gly Pro Arg Ala Gly Gly Thr Arg Leu Thr Leu Asn Gly
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Ser Lys Leu Leu Thr Gly Arg Leu Glu Asp Ile Arg Val Val Val Gly
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Asp Gln Pro Cys His Leu Leu Pro Glu Gln Gln Ser Glu Gln Leu Arg
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Cys Glu Thr Ser Pro Arg Pro Thr Pro Ala Thr Leu Pro Val Ala Val
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Trp Phe Gly Ala Thr Glu Arg Arg Leu Gln Arg Gly Gln Phe Lys Tyr
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Thr Leu Asp Pro Asn Ile Thr Ser Ala Gly Pro Thr Lys Ser Phe Leu
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Ser Gly Gly Arg Glu Ile Cys Val Arg Gly Gln Asn Leu Asp Val Val
1265   1270   1275   1280
Gln Thr Pro Arg Ile Arg Val Thr Val Val Ser Arg Met Leu Gln Pro
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Ser Gln Gly Leu Gly Arg Arg Arg Val Val Pro Glu Thr Ala Cys
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Ser Leu Gly Pro Ser Cys Ser Ser Gln Gln Phe Glu Glu Pro Cys His
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Val Asn Ser Ser Gln Leu Ile Thr Cys Arg Thr Pro Ala Leu Pro Gly
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Leu Pro Glu Asp Pro Trp Val Arg Val Glu Phe Ile Leu Asp Asn Leu
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Val Phe Asp Phe Ala Thr Leu Asn Pro Thr Pro Phe Ser Tyr Glu Ala
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Asp Pro Thr Leu Gln Pro Leu Asn Pro Glu Asp Pro Thr Met Pro Phe
              1380   1385   1390
Arg His Lys Pro Gly Ser Val Phe Ser Val Glu Gly Glu Asn Leu Asp
    1395   1400   1405
Leu Ala Met Ser Lys Glu Glu Val Val Ala Met Ile Gly Asp Gly Pro
    1410   1415   1420

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Cys Val Val Lys Thr Leu Thr Arg·His His Leu Tyr Cys Glu Pro Pro
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Val Glu Gln Pro Leu Pro Arg His His Ala Leu Arg Glu Ala Pro Asp
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Ser Leu Pro Glu Phe Thr Val Gln Met Gly Asn Leu Arg Phe Ser Leu
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Gly His Val Gln Tyr Asp Gly Glu Ser Pro Gly Ala Phe Pro Val Ala
    1475             1480             1485
Ala Gln Val Gly Leu Gly Val Gly Thr Ser Leu Leu Ala Leu Gly Val
    1490             1495             1500
Ile Ile Ile Val Leu Met Tyr Arg Arg Lys Ser Lys Gln Ala Leu Arg
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Asp Tyr Lys Lys Val Gln Ile Gln Leu Glu Asn Leu Glu Ser Ser Val
            1525             1530             1535
Arg Asp Arg Cys Lys Lys Glu Phe Thr Asp Leu Met Thr Glu Met Thr
        1540             1545             1550
Asp Leu Thr Ser Asp Leu Leu Gly Ser Gly Ile Pro Phe Leu Asp Tyr
        1555             1560             1565
Lys Val Tyr Ala Glu Arg Ile Phe Phe Pro Gly His Arg Glu Ser Pro
    1570             1575             1580
Leu His Arg Asp Leu Gly Val Pro Glu Ser Arg Arg Pro Thr Val Glu
1585             1590             1595                 1600
Gln Gly Leu Gly Gln Leu Ser Asn Leu Asn Ser Lys Leu Phe Leu
        1605             1610             1615
Thr Lys Phe Ile His Thr Leu Glu Ser Gln Arg Thr Phe Ser Ala Arg
        1620             1625             1630
Asp Arg Ala Tyr Val Ala Ser Leu Leu Thr Val Ala Leu His Gly Lys
    1635             1640             1645
Leu Glu Tyr Phe Thr Asp Ile Leu Arg Thr Leu Leu Ser Asp Leu Val
    1650             1655             1660
Ala Gln Tyr Val Ala Lys Asn Pro Lys Leu Met Leu Arg Arg Thr Glu
1665             1670             1675                 1680
Thr Val Val Glu Lys Leu Leu Thr Asn Trp Met Ser Ile Cys Leu Tyr
            1685             1690             1695
Thr Phe Val Arg Asp Ser Val Gly Glu Pro Leu Tyr Met Leu Phe Arg
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Gly Ile Lys His Gln Val Asp Lys Gly Pro Val Asp Ser Val Thr Gly
    1715             1720             1725
Lys Ala Lys Tyr Thr Leu Asn Asp Asn Arg Leu Leu Arg Glu Asp Val
    1730             1735             1740
Glu Tyr Arg Pro Leu Thr Leu Asn Ala Leu Leu Ala Val Gly Pro Gly
1745             1750             1755                 1760
Ala Gly Glu Ala Gln Gly Val Pro Val Lys Val Leu Asp Cys Asp Thr
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Ile Ser Gln Ala Lys Glu Lys Met Leu Asp Gln Leu Tyr Lys Gly Val
        1780             1785             1790
Pro Leu Thr Gln Arg Pro Asp Pro Arg Thr Leu Asp Val Glu Trp Arg
        1795             1800             1805
Ser Gly Val Ala Gly His Leu Ile Leu Ser Asp Glu Asp Val Thr Ser
    1810             1815             1820
Glu Val Gln Gly Leu Trp Arg Arg Leu Asn Thr Leu Gln His Tyr Lys
1825             1830             1835                 1840
Val Pro Asp Gly Ala Thr Val Ala Leu Val Pro Cys Leu Thr Lys His
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Val Leu Arg Glu Asn Gln Asp Tyr Val Pro Gly Glu Arg Thr Pro Met
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Leu Glu Asp Val Asp Glu Gly Gly Ile Arg Pro Trp His Leu Val Lys
        1875             1880             1885
Pro Ser Asp Glu Pro Glu Pro Pro Arg Pro Arg Arg Gly Ser Leu Arg
    1890             1895             1900
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Phe Gln Val Ile Leu Ser Thr Ser Arg Pro Val Pro Leu Ala Val Lys
            1940             1945             1950
Tyr Phe Phe Asp Leu Leu Asp Glu Gln Ala Gln Gln His Gly Ile Ser
        1955             1960             1965
Asp Gln Asp Thr Ile His Ile Trp Lys Thr Asn Ser Leu Pro Leu Arg
    1970             1975             1980
Phe Trp Ile Asn Ile Ile Lys Asn Pro Gln Phe Val Phe Asp Val Gln
1985             1990             1995              2000
Thr Ser Asp Asn Met Asp Ala Val Leu Leu Val Ile Ala Gln Thr Phe
            2005             2010              2015
Met Asp Ala Cys Thr Leu Ala Asp His Lys Leu Gly Arg Asp Ser Pro
        2020             2025             2030
Ile Asn Lys Leu Leu Tyr Ala Arg Asp Ile Pro Arg Tyr Lys Arg Met
        2035             2040             2045
Val Glu Arg Tyr Tyr Ala Asp Ile Arg Gln Thr Val Pro Ala Ser Asp
    2050             2055             2060
Gln Glu Met Asn Ser Val Leu Ala Glu Leu Ser Trp Asn Tyr Ser Gly
2065             2070             2075              2080
Asp Leu Gly Ala Arg Val Ala Leu His Glu Leu Tyr Lys Tyr Ile Asn
            2085             2090              2095
Lys Tyr Tyr Asp Gln Ile Ile Thr Ala Leu Glu Glu Asp Gly Thr Ala
        2100             2105             2110
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